

**METHODS AND APPARATUS FOR GENERATING A DATA  
CLASSIFICATION MODEL USING AN ADAPTIVE LEARNING ALGORITHM**

**Cross Reference to Related Application**

5           The present invention is related to United States Patent Application  
entitled "Method and Apparatus for Generating a Data Classification Model Using  
Interactive Adaptive Learning Algorithms," <sup>09/713,341</sup> (~~Attorney Docket Number~~  
~~YOR920000507US1~~), filed contemporaneously herewith, assigned to the assignee of the  
present invention and incorporated by reference herein.

**Field of the Invention**

10           The present invention relates generally to the fields of data mining or  
machine learning and, more particularly, to methods and apparatus for generating data  
classification models.

**Background of the Invention**

15           Data classification techniques, often referred to as supervised learning,  
attempt to find an approximation or hypothesis to a target concept that assigns objects  
(such as processes or events) into different categories or classes. Data classification can  
20 normally be divided into two phases, namely, a learning phase and a testing phase. The  
learning phase applies a learning algorithm to training data. The training data is typically  
comprised of descriptions of objects (a set of feature variables) together with the correct  
classification for each object (the class variable).

25           The goal of the learning phase is to find correlations between object  
descriptions to learn how to classify the objects. The training data is used to construct  
models in which the class variable may be predicted in a record in which the feature  
variables are known but the class variable is unknown. Thus, the end result of the  
learning phase is a model or hypothesis (e.g., a set of rules) that can be used to predict the

Change(s) applied  
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